

Political Market Design*

Michael Funk[†]

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Abstract

Agency theory indicates the difficulties to provide politicians with strong incentives, especially the infeasibility of explicit incentives. Therefore, as Tirole (1994), Dixit (2002) and Besley (2004) concluded, career concerns have to be important in politics. However, this paper finds career concerns to be very lame, because in general politicians cannot transfer their reputation outside their constituencies. Politicians in such closed constituencies (e.g. mayors) have no outside option, whereas agents in open constituencies (e.g. city managers) do have. This idea is captured by comparing career concerns in a retrospective voting framework and a matching market between politicians and constituencies. We find that in an open constituency effort is always increasing in talent, whereas in a closed constituency talented agents exert low effort. In order to improve incentives the political market should be redesigned by opening government to outsiders.

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* *Acknowledgements:*

[†]University of Fribourg, Departement of Economics, Bd. de Pérolles 90, 1700 Fribourg (Switzerland), +41 (026) 300 82 65, michael.funk@unifr.ch

1 Introduction

One of the central issues in Political Economics is how to provide politicians with incentives to follow the citizens' preferences. Recently institutional mechanisms such as balanced budget rules, fiscal federalism, direct democracy, divided government or independent auditors have been extensively discussed in the literature¹. Yet these institutions seem to be only fixes to a much more fundamental problem. Usually politics is treated as a principal-agent problem, in which elections serve as a instrument to hold politicians accountable for their conduct in office. Within this paradigm all the proposed institutional mechanisms try to constrain the agent's scope of action and/or improve the control of the agent as if the reelections constraint provides an explicit contract. However, there are good reasons why explicit incentives are not feasible for political agents.

In politics, monitoring and controlling of agents is very difficult as there are multiple and changing dimensions of performance. A basic insight from agency theory states that such conditions do not allow for explicit incentives, in which the agent's utility depends on marginal productivity (e.g. Holmström and Milgrom (1991)). Moreover, elections clearly constitute an incomplete contract, because the reelection constraint cannot be fixed ex ante (e.g. Tirole (1999))² and politicians are accountable to multiple principals such as special interest groups, political parties, and the electorate (e.g. Dixit 1997).Tirole (1994), Dixit (2002), and Besley (2004) consequently concluded that in absence explicit incentives, implicit incentives and especially career concerns have to be of great importance in politics.

Such career concerns were first described by Fama (1980) and formalized in an ingenious article by Holmström (1999). Agents exert effort in order to influence the market's perception of their ability, which translates into higher compensation the next period. Consequently, there is no direct link between performance and compensation and hence no explicit incentive³. A central insight from this literature is that such implicit career incentives depend on a market in which agents as well as principals symmetrically update

¹For a comprehensive survey of this literature see Persson and Tabellini (2000) and Besley (2006).

²Tirole (1999) suggests that the problem to conceptualize incomplete contracts may explain why the normative agenda of political scientist has been changing so little since the 18th century enlightenment.

³Gibbons and Murphy (1992) study the interesting interaction of implicit and explicit incentives.

their beliefs about an agent's talent.

This is where our contribution starts because strictly speaking, today there is no real political market. Political agents can only run for office in the constituency where they are resident; that is, they cannot run for a similar position in another constituency without moving there first. Consequently the possibilities to transfer a reputation for being a good politician to another more attractive position are very limited.⁴ These major limitations have been first described by Eichenberger (1999) and Eichenberger (2003), who suggested that an open market for politicians would improve the politicians' incentives. The purpose of our paper is to investigate this claim in more detail.

The literature on incentives in the public sector concentrates on the polarity of elected politicians (e.g. mayors) versus appointed bureaucrats (e.g. city managers).⁵ We argue that if career concerns are of great importance in politics, the selection mechanism will not be the key to understand incentives of public officials. Much more important are their career opportunities, which is why we concentrate in our study on the openness of organizations; that is, the possibility to enter and exit the single organizational entity, such as a government or a department of the public administration. How differ incentives in an open organization from which an agent can move on to another often better position (e.g. city manager), as opposed to a closed organization, which does not allow to pursuit the same job (e.g. mayor) somewhere else? To answer this question we have to compare career concerns in a closed versus an open organization.

The closed organization is modeled similar to a simple retrospective voting game, in which the voters' update their knowledge of the politician's talent and compare it to an earlier set re-election rule. This threshold depends on the quality of the challenger from

⁴Often career incentives for politicians derive from inside a political party or from an outside option in the private sector. Both ways they rather align with some special interests than with general welfare.

⁵Besley and Coate (2003) see the main difference between elected and appointed regulators in the way direct election allow the voters to unbundle policy issues. Maskin and Tirole (2004) suggest that elections provide a better opportunity for the electorate to screen and discipline their officials. On the one hand this forces politicians to follow more closely the electorate's preferences, on the other hand politicians have incentives to pander to public opinion. A different road explore Alesina and Tabellini (2007) and Alesina and Tabellini (2008) by proposing a general framework to study the allocation of policy tasks to politicians who are driven by their reelection concerns and bureaucrats motivated by career concern. Borgne and Lockwood (2006) explore the possibility that under career concerns elections might demotivate agents, if their production technology is at least partly multiplicative in talent and effort.

inside the organization, who is expected to produce e.g. average output. Incentives then derive from the potential loss of office.

In an open organization an outsider can obtain an office and any office holder can leave for an outside option. In order to represent such organizations, we apply a matching model proposed by Casas-Arce (2005). There each period the market for agents opens and the constituencies and agents are matched along their exogenous productivity and their talent, respectively. Hence the most productive constituencies obtain the most able politicians. We find that in an open organization effort is globally increasing in expected ability. Thereby, we identify the heterogeneity of principals as of major relevance for the provision of career incentives. In a closed organization, in turn, which does not allow for an assortative matching of principals and agents, effort only increases as long as expected talent is below the re-election threshold; for the more able agents effort is decreasing in expected talent.

This result has some important implications: whereas closed constituencies are always troubled by a trade-off between the selection and the incentive property of election (e.g. Fearon (1999)), open constituencies provide also for the most talented agents strong incentives; that is, the most talented agents work the hardest. Moreover, because matching is assortative, we would expect such market for public officials to be more efficient. In a market the most able agents earn the highest salaries and agents are in general expected to pursue a longer career. Hence, we would expect the investment in job specific human capital paying off.

These insights we then use to bring forward normative suggestions for the design of a political markets. Since we know from agency theory that career incentives are important in the public sector, we have to find ways to enhance them. The aspired political market design should provide strong incentives for politicians to follow the preferences of their constituencies. Therefore, the organizational form has to be open; that is, access to political office should be open to professionals from other constituencies. Usually such openness is only granted for appointed officials, such as city managers. However, there is no obvious reason why organizational openness and direct election should be mutual exclusive. On the contrary: appointment by an elected committee introduces a second

principal-agent problem and a danger of collusion, whereas election are widely considered to be the most effective way for citizens to express their preferences and hold politicians accountable.

We therefore propose to redesign political markets through an institutional set-up, which keeps all the political accountability of elections while adding the crucial incentive dimension of strong career concerns: an open market for politicians. Such a market would finally overcome the trade-off between selection and incentives because the more able candidate is more likely to be in a lucrative constituency and hence globally exerts higher effort.

This paper is based on the immense literature on agency problems in Political Economics, especially the applications of the career concern paradigm to politics e.g. Persson and Tabellini (2000), Ashworth (2005) and Borgne and Lockwood (2006). The importance of stronger implicit incentives in politics is emphasized by Myerson (2006), who proposes for nation-building a federalist system. He shows that in federalism a bad equilibrium can not prevail on the regional as well as on the national level, because regional governors can gain a reputation for being a good politician in order to become a contender for national office. An different approach Gersbach (2005) pursuits who proposes to complement elections with additional incentive contracts. We feel that such contracts cannot improve incentives for political agents, because they rely on explicit incentives.

This paper deals with incentives in politics, even though most of the ideas can be applied to organizations in general. Even in firms, which rely on very specific skills, we may observe the idleness of the most talented agents as long as implicit incentives are not amend with additional explicit incentives. The paper is structured as follows: Section 2 summarizes the lessons from agency theory for the provision of incentives in politics. Section 3 outlines the argument along a matching model. Section 4 Section discusses the implication for the design of political markets. 5 gives some preliminary empirical result and anecdotal evidence.

2 Lessons from Agency Theory

The particularity of incentives for politicians and other government agents attracted already some attention, especially by Tirole (1994) and Dixit (2002), whose line of argument we follow in this section. The starting point of any studying of agency problems in politics must be the following observation: much more than in the private sector, a public agent has to pursue multiple goals, which are hard to monitor and difficult to measure. One way to mitigate such problems is relative performance evaluation, which allows the exclusion of common shocks and hence improve the information on individual performance. Indeed elections are staged as a rank-order tournament between an incumbent and a challenger which compete for a fixed prize - the next term in office - but as they can never perform on the same job or in the same environment, such comparison does only bring minor informational advantage (Funk and Eichenberger 2008). Therefore, if anything, the difficulties to assess an agent's performance, must be more pronounced in the public than in the private sector.

Holmström and Milgrom (1991) show that in such an environment asymmetries in monitoring may jeopardize incentives, because an observable output such as the construction of a representative building may completely deviate incentives from an immeasurable dimension such as social welfare. As a result some of the institutional mechanisms mentioned in the introduction, might have a contrary effect and the effect on overall welfare is ambiguous. For the principal it may be therefore beneficial to abstain from explicit incentives altogether and leave an agent to low-powered incentives; that is, only a small fraction to the marginal product translates into compensation.

There are other reasons why there is little room for explicit incentives in politics: the electorate assessment of an agent cannot be enforced by a court, which is why only incomplete contracts and subjective performance evaluation are available⁶. Additionally, an agent might be accountable to several principals, such as political parties, special interest groups, and the electorate (Dixit 1996).

The prevalence of low-powered incentives in politics therefore raises an important

⁶The tournament setup of elections disposes at least with the problem of reneging by the principal.

question: what forces politicians to follow the voters preferences? Otherwise the very design of incentives in politics would enhance low performance, rent-seeking and pandering to special interests.

One possibility would be to define a narrow mission, and install a tight monitoring regime for political agents. This is the usual design of low-powered incentive schemes, which is prevailing in bureaucracies and inside firms. However, such incentive schemes hardly fit the image of an innovative, dynamic executive politician. Furthermore the monitoring costs would be substantial. Secondly, politicians could be overwhelmingly intrinsically motivated, which to some extent can be observed, especially when politicians have similar preferences to the electorate (Besley and Ghatak 2005). Yet it would be extremely optimistic to rely in politics mainly on intrinsic motivation.

This leaves the provision of incentives in politics to career concerns as described by Holmström (1999). The main idea is that current performance translates into future compensation through the channel of the market's perception of an agent's talents, which affects expected future output⁷. An agent expels costly effort because she wants to appear talented. Future compensation will then be adjusted either by moving to a more lucrative position or by a pay raise in the same position as a reaction to market pressure. In this setup effort, which is only known to the agent, is driven by talent uncertainty. Therefore no explicit incentives are needed to control moral hazard.

Of course, it would be wrong to claim that today's politicians do not have any career concerns. Indeed they want to appear talented but only as much as is needed to win against a next best challenger. Moreover, they have very strong concern for their reputation, but mostly their peers are not the citizens or the electorate but the members and leaders of a political party; that is, in today's politics career advancement depends above all on performance along the party's preferences. Sometimes even a future career outside politics provides a politician's incentives, what again can be exploited by political pressure groups.

As opposed to the well known explicit incentive paradigm, career concerns have some distinguishing properties, which make them suitable for the public sector, that is an en-

⁷Or more generally, the agent's time invariant characteristic.

environment in which performance has multiple dimensions and is difficult to monitor. This argument follows mainly Dewatripont, Jewitt, and Tirole (1999). In a multi-task environment, the observation of aggregated performance may still decrease incentives as the noise on each dimension is added. However, the effect is hardly as pronounced as with explicit incentives because the aggregation of talent risk increases incentives. If, for example, noise is independent of the number of task, additional task will not affect performance.⁸ Information aggregation therefore might be beneficial under career concerns, whereas under explicit incentives it is always negative or at best neutral. Moreover, under explicit incentives the principal may want to exclude some performance dimensions in order not to jeopardize another one. The agent in turn prefers a broad mission in order to extract rents. Implicit incentives provoke more symmetric preferences for a narrow mission because an agent only wants to perform on a dimension which the market esteems. Consequently, the task exclusion result for implicit incentive is quite different from the Holmström and Milgrom (1991) paradigm for explicit incentive.

3 Career Concerns in Organizations

The setup: In order for career concerns to work certain assumption have to be met. Firstly voters should not only want to punish bad politicians retrospectively. They should also care about a politician’s ability, which they expect to translate in future output. This is not a very strict assumption as most empirical research suggests that voters think about election also in terms of selecting the most capable candidate (Fearon 1999). However, because the politician’s action can not be observed a moral hazard problem arises. Career concerns therefore combine features of adverse selection and moral hazard.

Secondly, the agents as well as the principals are equally informed about an agent’s talent. This assumption of symmetric learning is a key to career concerns: The agent does not only want to fool the principals by sending credible signals, she also wants to

⁸The multiplicative production function can even lead to a high effort equilibrium, yet there is the issue of multiple equilibria (Dewatripont, Jewitt, and Tirole 1999).

prove herself by working for the principals. For many aspects of politics this is a sensible assumption. A politician, for example, often does not know how she will cope with the challenges of a new office. Though, symmetric learning is less probable if we assume ideological agents (Ashworth 2005).

Thirdly, although output can be observed, no explicit contract can be written *ex ante*. Whereas this is a rather strong assumption for the private sector, it is very appropriate in politics, because - as discussed above - it is almost impossible to write any explicit contract in such an elusive environment. It also fits the perception of politics being governed by incomplete contracts.

Existing career concern models in Political Economics such as Persson and Tabellini (2000) and Ashworth (2005) concentrate on the electorate's updating about the politician's ability. Consequently an incumbent exerts effort in order to increase its probability of reelection. Our treatment of a closed organization is in this tradition. Yet, some key features of the career concern paradigm are missing. In the market for managers, incentives are strong because a firm will adjust wages due to market pressure. If a firm can not do so, the agent will move to a more valuable outside option. Without this outside option incentives are lame, because like in the retrospective voting paradigm, the principal compares the expected output against a reelection threshold, which is exogenously assumed to be e.g. average talent. Therefore, without the outside option, higher perceived talent does not automatically translate into higher benefits in the next period and consequently an agent does not exert any additional effort.

In order to investigate the difference between an open and a closed organization, we then employ a model proposed by Casas-Arce (2005). He draws attention to the effect of heterogeneity among principals on career concerns in the managerial labor market. For this purpose he proposes two dimensions of heterogeneity. Firstly, the principals may have different productivity, that is a different ability to translate the agent's output into revenues. Secondly, the principals may differ in the visibility of their agents, that is market's ability to evaluate an agent's performance. To begin with, we concentrate on the former.

We translate the assumption of different productivity into the most simple political

agency framework. As we are only interested in the incentive effect, we abstain from most of the complications of some political agency models, such as tax setting and the endogenous distribution of income. We furthermore abstain from the question of multi-tasking which was important to motivate the paper.

The agents: In each community a committee or the electorate chooses a political agents i , which produces an output $y_{it} = \theta_i + a_{it} + \varepsilon_{it}$. Output can be observed by everybody and depends on the agents time-invariant characteristic θ (say ability or talent), her effort a and a noise term ε . Like in most career concern models we assume that talent and the error term are independent normally distributed random variable with $\theta = N \sim (\bar{\theta}, \sigma_\theta^2)$ and $\varepsilon = N \sim (0, \sigma_\varepsilon^2)$. The cumulative distribution function cdf of the random variables $\theta + \varepsilon \sim N(\bar{\theta}, \sigma_\theta^2 + \sigma_\varepsilon^2)$ is $F()$, its probability density function $f()$. The error term is an attribute of each community and for now the same for all principals, whereas $\bar{\theta}$ is a realization from an underlying random variables $\Psi(\bar{\theta})$. Crucial assumptions are further that the agents' real talent is unknown to everybody and that the agent effort is costly. All agents have the same cost function $c(a)$ with $c'(a) > 0$, $c''(a) > 0$. Note that high effort can be interpreted as low extraction of rents (Alesina and Tabellini 2007).

There are two periods: during the first period an agents exerts effort to effect the perception of her talent, which again translates into higher benefits in the second period. Expected output in the second period $E(y_2)$ equals expected talent $E(\theta)$ because in the final period effort is zero. The learning process follows the usually updating with normally distributed random variables: Expected talent in the second period can then be written as $E[y_2|y_1] = (1 - \alpha)\bar{\theta} - \alpha(y_1 - \hat{a}_1) = (1 - \alpha)\bar{\theta} - \alpha(a_1 - \hat{a}_1 + \theta + \varepsilon)$, where \hat{a} is the conjecture of the agent's effort and α the signal to noise ratio $\frac{\sigma_\theta^2}{\sigma_\theta^2 + \sigma_\varepsilon^2}$.

Equilibrium in a closed organization: As a benchmark we first investigate the incentives in an organization, whose agent's do not participate in a competitive market. This might be a government agency or a community, but also a private firm whose agents

have very specific skills without any value to the outside market. This implies that an agent's challenger can only come from within the organization, hence the performance benchmark is the challenger's expected output \bar{y} e.g. the average of a well known population. Note that \bar{y} could also derive from yardstick competition representing average performance of the peer communities.

Additionally, there is no pressure to marginally adjust wages, which is why higher expected output y^e will not automatically translate into higher income. That is, in absence of a competitive market, the wage R can not be determined endogenously; it is exogenously set by a board or a committee.

There are two interpretation for such a setup: Firstly, similar to retrospective voting the agent expects to keep office if her expected performance exceeds a certain threshold earning R , e.g. a wage and other benefits from office; if the agent has a low first period output y_1 the principal will update the agent's talent and expected output might drop below the reelection threshold. Then she will lose the job. This fear of loosing the job provides incentives in a closed organization. Secondly, the setup may describe promotion inside an organization from a low income position to a better paid one; that is $R = \bar{R} - \underline{R}$ where $\bar{R} > \underline{R}$.

Expected second period wage consequently is

$$E[R_2|y_1] = R \Pr(y_2^e > \bar{y}) \quad (1)$$

where the probability of $(y_2^e > \bar{y})$ can be expressed as $E[y_2 | y_1] = (1 - \alpha)\bar{\theta} + \alpha(a_1 - \hat{a}_1 + \theta + \varepsilon) > \bar{y}$. It is useful to separate the random variables θ and ε and define $\Gamma(a) = \frac{\bar{y} - \bar{\theta}}{\alpha} + \bar{\theta} - a_1 + \hat{a} < \theta + \varepsilon$, which is the threshold condition for $(y_2^e > \bar{y})$. Second period wage depends on first period effort the the principal's prior of an agent's ability.

$$E[R_2|y_1] = R \left(1 - F \left(\frac{\bar{y} - \bar{\theta}}{\alpha} + \bar{\theta} - a_1 + \hat{a} \right) \right) \quad (2)$$

$$= R \left(\int_{\Gamma(a)}^{\infty} f(x) dx \right) \quad (3)$$

The differentiation yields

$$\frac{\partial E[R_2|y_1]}{\delta a} = R f\left(\frac{\bar{y} - \bar{\theta}}{\alpha} + \bar{\theta} - a_1 + \hat{a}\right). \quad (4)$$

In equilibrium the principal has the correct conjecture \hat{a} of the agent's effort. Therefore, marginal costs of effort are

$$c'(a_1) = R f\left(\frac{\bar{y} - \bar{\theta}}{\alpha} + \bar{\theta}\right). \quad (5)$$

Using the properties of the normal distribution yields our first result

Proposition 1 *In a closed organization effort is increasing in talent until output reaches the benchmark \bar{y} ; thereafter effort is decreasing in talent. Additionally, incentives decline in the noise σ_ε^2 as well as in talent uncertainty σ_θ^2 .*

Similar to Ashworth (2005) (who finds that under some specific conditions in repeated election, effort of incumbents is constantly decreasing in talent) we find that in a closed organization the most talented agents have very weak incentives. For our studying of incentives in politics this result has far reaching consequences: today, incentives are lame for the most able politicians. Additionally, the model lacks the specific effect of learning on incentives because information on an agent's talent is not valuable in the second period. The learning in a closed organization only effects the probability of beating the threshold.

The most obvious application for such closed organization is in politics because usually politicians are tied to their constituency. As a result especially the good politicians have little incentives to work hard: neither to prove their talent to an outside constituency nor to ward of a high quality challenger entering from outside. Only a federalist structure may mitigate the problem as the vertical movement of politicians improves incentives. Even though the selection of candidates for higher office mostly depends on the hierarchy of a political party in contrast to performance in a political office.

Another example for such an incentive structure are bureaucracies, which in absence of explicit incentives greatly depend on implicit incentives. Usually bureaucrats face

low-powered incentives, which are very lame in absence of outside options. Again this is especially pronounced for the most able bureaucrats. Then only narrow rules of engagement and tight controls can tame the momentum of an expanding bureaucracy. If the politicians fail to do so, bureaucrats will truly behave like Niskanen's budget maximizer: they seek broad missions and high discretionary budgets in order to extract maximum perks.

Heterogenous communities: Consider now different communities or constituencies j which differ in their productivity of public goods. The reason for this difference may derive from exogenous influences, such as geography or other environmental influences, but also urbanization and ultimately wealth. For simplicity we consider only two types $I_j \in \{\underline{I}, \bar{I}\}$, where $0 < \underline{I} < \bar{I}$. The total revenue which an agent actually produces is $y_i I_j$. The basic idea is that in some communities the agents' output y translate in a more efficient administration and ultimately in more public goods g .

As we are mainly interested in the incentive effect we keep the political environment as simple as possible. We can write the budget constraint as $g = y_i I_j - R_i$. The wage R_i which a community can pay is endogenous and depends on its productivity and the agents expected output. Therefore high productivity community want to select high ability agents in order to receive the most public goods. However, they have to pay a higher wage for talented agents. In order that the agents cannot compete all the public goods away, we further assume that each community has to produce a minimum of public goods \bar{g} , say streets, schools and social security. As we will see below a talented agent in a high productivity communities can produce a surplus of public goods, whereas the low ability candidates in a low productivity communities produce only the minimum of public goods \bar{g} .

Equilibrium in an open organization: There are two crucial differences between a closed organization and an open one, which is exposed to a competitive market: Firstly before each period the market opens and each principals can make bids for one agent.

Secondly, because of the competition for the best agents, the wage is endogenously determined through the interaction of the agents' expected output y_{it}^e and the productivity of the community. Before each period the principals make a wage offer to an agent and a matching will occur if the agent accepts. The agents' expected second period wage R_2 depends on productivity of the community I_j and the first period output y_{i1} of the agent, from which the principals try to deduce the agents' talent.

There is a continuum of agents of mass 1. In order to have perfect competition among principals we further assume a continuum of principals with mass $m > 1$. Following closely the model by Casas-Arce (2005) we can now define a stable matching: firstly, the agents choose the offer which maximizes their income; secondly, the communities cannot choose to produce less than \bar{g} ; thirdly they cannot increase the amount of g by attracting a different agent. Agents will choose the principal with the highest wage independently of the principals productivity, as the latter does not effect the learning process.

Now we can express the wages, which the agents are able to receive in equilibrium. Firstly, note that if all communities were the same, they could only provide the minimum amount of public goods \bar{g} . In each period the expected output y_{it}^e is distributed over the population of agents. We denote by \bar{y}_t^e the quantile of that distribution for which holds $y_{it}^e > \bar{y}_t^e$. Those are the agents, who will find a match with a high productivity principal; that is $I_j = \bar{I}$ if $y_{it}^e > \bar{y}_t^e$ and $I_j = \underline{I}$ if $y_{it}^e < \bar{y}_t^e$. Note that \bar{y}_t^e is a similar threshold as above in an closed organization. In equilibrium the principals can pay the following wages.⁹

$$R_{it} = \begin{cases} \underline{I}y_{it}^e - \bar{g} & \text{if } y_{it}^e < \bar{y}_t^e \\ \bar{I}y_{it}^e - \bar{g} - (\bar{I} - \underline{I})\bar{y}_t^e & \text{if } y_{it}^e > \bar{y}_t^e \end{cases} \quad (6)$$

For a stringent proof see Casas-Arce (2005). The intuition is the following: Because there are more principals than agents, perfect competition among low productivity principals implies that they only receive the minimum amount of public goods \bar{g} . However, a \bar{I} -type principal can obtain higher output from every agent. Therefore they are willing to pay a higher wage, what results in assortative matching. Again all \bar{I} -type principals

⁹We adopt the convention that a non-matched agent earns $R_i = -\infty$.

produce the same amount of public goods, which must be higher than \bar{g} ; otherwise they would not be willing to poach and pay a good agent. The surplus must be at least as high as what a \bar{I} -type principal could make by attracting the best agent with a bad match; that is $(\bar{I} - \underline{I})\bar{y}_{it}^e$. Consequently, the \bar{I} -type principals compete only with \underline{I} -type principals. The rents from this incomplete competition must be divided between the principals and the agents.

These wages imply that the best opportunity for a agents to increase its earnings comes from moving from a low to a high productivity community. We find this a rather realistic scenario for the public sector where wages tend to be very rigid depending on the economic potency of the community or country.¹⁰ Therefore the best possibility for career advancement is by mobility.

We solve the model backwards in order to obtain first period effort. In the second period agents do not have any incentive and therefore only produce output from their talent, which is why the matching is based on expected ability. Again we can use the expression $\Gamma(a_i) = \frac{\bar{y}^e - \bar{\theta}}{\alpha} + \bar{\theta}_i - a_{i1} + \hat{a}_i < \theta_i + \varepsilon$ to characterize the threshold between a high and low-type principals. The expected second period wage then is:

$$E[R_2] = \int_{-\infty}^{\Gamma(a)I} \underline{I}E[y_{i2}|y_{i1} = a_i - x]f(x)dx + \int_{\Gamma(a)}^{\infty} [\bar{I}E[y_{i2}|y_{i1} = a_i - x] - (\bar{I} - \underline{I})\bar{y}_2^e] f(x)dx - \bar{g}. \quad (7)$$

As \bar{I} can be written as $\bar{I} = \underline{I} + (\bar{I} - \underline{I})$ the probabilities getting a match with a \underline{I} -type and a \bar{I} -type principal can be separated.

$$E[R_2] = \underline{I} \int_{-\infty}^{\infty} E[y_{i2}|y_{i1} = a_i - x]f(x)dx + (\bar{I} - \underline{I}) \int_{\Gamma(a)}^{\infty} [E[y_{i2}|y_{i1} = a_i - x] - \bar{y}_2^e] f(x)dx - \bar{g}. \quad (8)$$

The differentiation yields

¹⁰Di Tella and Fisman (2004) find that US Gubernatorial wages respond to tax cuts, which they interpret as a form of reward for performance.

$$\frac{\partial E[R_2]}{\partial a_i} = \frac{\partial E[y_{i2}|y_{i1}]}{\partial a_i} \left[\underline{I} + (\bar{I} - \underline{I}) \int_{\Gamma(a)}^{\infty} f(x)dx + |E[y_{i2}|y_{i1} = a_i - x] - \bar{y}_2^e|_{x=\Gamma(a)} f(x)dx \right] \quad (9)$$

where $\frac{\partial E[y_{i2}|y_{i1}]}{\partial a_i}$ equals α . A further simplification allows the term $E[y_{i2}|y_{i1} = a_i - x]$ evaluated at $\Gamma(a_i)$:

$$\begin{aligned} E[y_{i2}|y_{i1}] &= (1 - \alpha)\bar{\theta} - \alpha(y_1 - \hat{a}_1) \\ &= (1 - \alpha)\bar{\theta} - \alpha(a_i + \Gamma(a_i) + -\hat{a}_1) \\ &= (1 - \alpha)\bar{\theta} - \alpha\left(a_i + \frac{\bar{y}_2^e - \bar{\theta}}{\alpha} + \bar{\theta}_i - a_{i1} + \hat{a}_i + -\hat{a}_1\right) \end{aligned}$$

Therefore, $E[y_{i2}|y_{i1} = a_i - x] = \bar{y}_2^e$. Now we can write the simplified result of the differentiation as

$$\frac{\partial E[R_2]}{\partial a_i} = \alpha \left[\underline{I} + (\bar{I} - \underline{I}) \int_{\Gamma(a)}^{\infty} f(x)dx \right] \quad (10)$$

Again, in equilibrium the principal has the correct conjecture \hat{a} of the agent's effort. Therefore, marginal costs of effort yields

$$c'(a_i) = \alpha \left[\underline{I} + (\bar{I} - \underline{I}) F \left(\frac{\bar{y}_2^e - \bar{\theta}}{\alpha} + \bar{\theta} \right) \right]. \quad (11)$$

With $F()$ as the cumulative distribution function of the random variables $\theta + \varepsilon \sim N(\bar{\theta}, \sigma_\theta^2 + \sigma_\varepsilon^2)$ we obtain our second result:

Proposition 2 *In an open organization with heterogeneous principals effort is increasing in expected talent. Additionally, incentives decrease in noise σ_ε^2 , but increase in talent uncertainty σ_θ^2 .*

There are three important effects: Firstly, as matching in an open market is assortative, we would expect such a market for public officials to be more efficient.¹¹ This

¹¹On the efficiency of assortative matching see e.g. Becker (1973).

efficiency is further pronounced by the fact that agents with high expected ability exert more effort which means even higher returns to effort.

Secondly, effort increases in the signal to noise ratio. This is the learning effect, which derives from the response of the wage to expected ability. Note that wages do not directly respond to realized output as with explicit incentives. However, wages respond to expected output because principals compete for the best agents, which is why the learning effect only appears in a competitive market environment. In a closed organization the learning of the agents' ability does not directly effect the wages, only the probability of promotion. Thus, the incentive effect of learning is much weaker.

Thirdly, incentives are fuelled by the agents' possibility to move to a \bar{I} -type community, respectively by the threat of a challenger ascending from another community: this is the reputation effect. Agents with higher expected ability face a higher probability of working for a \bar{I} -type principal. Therefore they have a steeper wage profile and effort is constantly increasing in an agent's talent. If there is no re-matching at the beginning of each period, the incentives deriving from the heterogeneity of principals will disappear. This effect is especially important when wages are very inelastic such as in politics or in a bureaucracy. Then an inability to move on to another office really jeopardizes incentives, notably for the very talented agents.

Hence we would expect incentives to be much stronger in an open political organization which is exposed to a competitive market. Especially the most talented politicians would have constantly high incentives. Further gains would result from an efficient matching of constituencies and political agents.

Similar effects we would expect in bureaucracies, where a closed organization leads to a truly inefficient budget maximizer à la Niskanen. In more open bureaucracies, however, where different government agencies and constituencies compete for the best agents, incentives will be almost converse: then also the most able bureaucrats work hard and prefer a narrow mission so that the outside market can learn their talent.

Finally, in the private sector despite other impressions, explicit incentive such as pay-per-performance are not very prevalent (Prendergast 1999). Most firms actually rely on low-powered incentives with a tight control of their employees and/or internal

promotion. Therefore, without any outside option we would expect incentives to be very lame, especially for the very talented employees. Indeed Lazear and Oyer (2004) suggest that the effectiveness of internal promotion depends on ports of entry on all levels. Hence, only an firm which is at least to some extent exposed to a external labour market, can hold internal incentives high.

First period outcome and market entry: The first period outcome has the same basic structure than the second period. The matching of principals and agents depends on expected output, which is $E[y_{1i}] = \hat{e}_{it} + \bar{\theta}_i$ and the market makes the right conjecture about \hat{e}_{it} , which is increasing in $\bar{\theta}_i$. Therefore, the matching in the first period depends on the market's valuation of ability. Again, high ability agents are matched to \bar{I} -type communities. Hence first period wages are increasing in $\bar{\theta}_i$ and show the same steep profile where $y_{i1}^e > \bar{y}_{i1}^e$.

First period wages depend on the expected ability at the moment of market entry, which is for the purpose of the model drawn - like in Casas-Arce (2005) - from an underlying continuous distribution $\Psi(\bar{\theta})$. However, as expected ability at the time of market entry determines the first wage, we would expect agents wanting to produce a very strong signal of their ability. There are two possibilities to do so: either by sending a costly signal à la Spence (1973), which is not correlated with productive ability, or by investing in specific human capital. We would expect a market, which is mainly driven by career concerns, to disesteem an uncorrelated signal, because the downstream updating process on the job only esteems real talent. Moreover, as such a market evaluates an agent's talent along a narrow mission, the market will request from all participants to obtain a very specific education which is supposed to be highly correlated with this mission. Therefore, agents rather invest in human capital than in an uncorrelated signal. This effect is even more pronounced as agents earn from the first period on a wage according to their expected ability and this information will be valuable also for the second period, indeed for the whole career.

In a closed organization in turn, incentives to invest in a signal of ability depend on an organization specific threshold. Agents with comparably low ability as well as agent

with very high ability have little return on any investment in human capital. Only the mediocre ones have incentives to invest. Moreover, in each election politicians face a high probability of dropping out without perspective of pursuing an equivalent job. Therefore, the institutional design forces upon the politicians a low value of continuation. Not surprisingly, there is almost nowhere a specific education for politicians. The profession depends still mainly on learning by doing. Because organization specific human capital might be not valuable anywhere else, there is little long-term valuation of such human capital. Rather, the threat to lose the position weakens incentives and shortens the time horizon. Therefore, short term signals, which are not correlated with productive ability seem to be much more probable in a closed organization.

4 Designing Political Markets

Flawed incentives in today's politics: Until now this paper proceeded as an investigation of career concerns in an open versus a closed organization. However, these insights have important implications for the design of political institutions. If we claim that career concerns are of major importance in politics, we have to discuss the normative implication and we have to evaluate existing political institutions on the career concerns they provide. In fact, we will argue that neither detailed institutional design not some specific election rule can restore incentives in politics: most importantly political agents should be exposed to a competitive market, where heterogenous principals employ agents on the basis of their expected ability.

This normative quest we call political market design because strictly speaking there is no such thing as a political market in today's politics (e.g. Eichenberger (2003)). Usually outsiders are not allowed to run for office and likewise politicians are not allowed to exit their constituency. Of course the historic experiences with foreign rulers were rather daunting, and as a result, the breakthrough of modern democracy was closely linked to the right of self-determination. Hence in most modern democracies only residents are eligible. Our analysis shows that these limitations have some major implications.

Firstly, principals do not have to adjust wages because of market pressure. Secondly,

highly talent agents do not have the prospect of running in a more attractive constituency. Therefore, the very design of today's political institutions prevents career concerns to play a significant role in politics. Because most other incentive mechanism are at best weak, sometimes even counterproductive, there is no effective constraint on politicians' action.

The role of elections: Elections are widely considered to be the most effective way for voters to express their preferences and hold politicians accountable (e.g. Maskin and Tirole (2004)). Until now we avoided the discussion about the relation between open organization and elections, however, we think there are good reasons to believe that elections actually work even better in an open political market than in a closed constituency.

Most of the literature concentrates on the polarity of appointed officials in an open organization - a bureaucrat with career concerns - and elected officials in a closed organization - a typical politician (e.g. Alesina and Tabellini (2007) and Alesina and Tabellini (2008)). In terms of executive responsibility it is easiest to think of the two paradigm as mayor and city manager.

However, the issue of appointed versus elected is only one dimension. We concentrated in this paper on the other important dimension, which is open versus closes organization. Whereas a mayor cannot run for office without being resident¹², a city manager pursuits a career as public servant moving from a minor to a more attractive office. Whereas the mayor misses career concerns, the city managers misses the screening and disciplining virtue of elections. Yet, election in an open organization are at least in theory not mutually exclusively - below the mayors in Baden-Württemberg provide the anecdotal evidence for this claim. For a start, the appointment of an officials introduces a second principal-agent problem with all its problems and flaws. Secondly, elected official are usually considered to be more responsive to changing public preferences.¹³ Thirdly, there is the danger of collusion between the elected and the appointed officials.

¹²The exception is a federalist state, which we will discuss futher below.

¹³Maskin and Tirole (2004) describe this attribute of elected officials as a possible disadvantage because politicians tend to pander to public opinion.

There is no obvious reason why voters should not be able to choose the more suited candidate for office even if the candidate is an outsider. Quite the contrary: today’s plurality elections suffer a systematic information asymmetry. Whereas the electorate knows a lot about the incumbent, they have almost no information on a potential challenger because the latter can never perform on the same job¹⁴. In an open market, however, elections become what they ultimately are meant to be: a tournament among different agents which enables better comparison of candidates as common shocks drop out (Funk and Eichenberger 2008).

	open	closed
elected	Political market	Mayor-council municipality
appointed	Councils-manager municipality	Niskanen’s bureaucracy

Table 1: Classification of public organizations

Implementing political markets: We propose therefore a design of the political market, which keeps all the political accountability of elections and allows the electorate to directly express its preferences while adding the crucial incentive dimension of strong career concerns: an open market for politicians. Such market would finally overcome the trade-off between selection and incentives because the more able candidates are more likely to gain a lucrative position and hence globally exerts higher effort.

For such a market to arise two institutional reforms have to be enacted: First, eligibility at the local and national level has to be granted to foreigners and to nationals who are not yet residents. This would enable politicians to run for office in another jurisdiction or country without quitting their current position. Thus, resident politicians have not only to compete with non-resident and foreign politicians, but they also have themselves the opportunity to run for office in an other constituency. Secondly, the wage of the political agent’s should be adjustable by the constituency and not determined by

¹⁴In modern democracies, political parties are meant to circumvent this problem by introducing a mechanism of collective reputation. However, such a mechanism will only work if the political party has better ability to control and ultimately to exclude a bad agent than the electorate. If a collective cannot do so, this has in fact the adverse effect of locking its members into corruption (Tirole 1996). Actually, a party has only incentives to exclude a bad politician if it fears to lose votes, that is, if it faces fierce competition (Hörner 2002).

a higher governmental level. This two adjustments dramatically changes incentives of politicians at the local and the national level.

The argument is not that outside politicians are altogether better than insiders but that the opening of the political market will alter the incentives for both foreign and domestic politicians to follow the citizens' preferences, and thus foster the advent of better politics. Many firms promote insiders to the top positions, however, the existences of an outside market determines incentives.

Such political market is effective as soon there is a critical mass of constituencies, which have a certain amount heterogeneity. The City Manager model in the USA and Finland as well as the mayors in the German state of Baden-Württemberg (which we discuss below) are examples for officials, which are driven by market incentives. Neither of these markets is particular big or lucrative. But they share the common feature that the simple existence of outside options - quite unintended - launched a dynamic market for public officials.

Of course, today's politicians and traditional elites have little interest to give away their quasi monopoly on political offices - even though, they foreclose their own career opportunities. Therefore, we would not expect such a market for politicians to arise spontaneously. Constituencies are often reluctant to elect an outsider, though the anecdotal evidence we present below, suggest that such prejudices quickly vanish.

A political market would be most effective if it is established at the international level by mutual consent of some, but by far not all countries. The international community should promoted the openness of political institutions by ensuring the eligibility of outsiders. Such a multilateral approach is necessary as the unilateral opening of the political institutions is a public good for other constituencies: the own politicians can not exit, whereas politicians of other constituencies gain the outside option.

The only situation when we would expect such a political market to evolve spontaneously is during serious crisis and/or internal conflict. In times of trouble most organizations such as firms, sport teams or even the international community rely on outsiders. Only in politics this is no option, which, in times of crises, paves the way for ideologically extreme politicians to enter the political arena.

Not surprisingly, for all real world markets for political officials, an internal crisis triggered the institutional reform. Then the opening of the political institutions was a case of a last resort. In the USA the Council-Manager model was introduced at the beginning of the 20th century, when local government was dominated by corrupt political party machines. The newly introduced city manager was an attempt by the progressive movement to introduce a professional administration beyond party lines and clientelism.

An even more striking example for a market of political agents evolving from internal conflict provides the medieval Italian city states. We show in another paper how these prosperous city states adopted in the 13th century a new government system by handing over the executive power to a foreign professional leader. This Podestà was appointed to lead the commune for a limited term only, most commonly six month or one year. Again at the origin of this institutional change was enduring internal conflict, which only an outsider could mediate between the hostile factions. Because of the strict term limit - and quite unintended - a market for podestà was launched with several hundred participants and high gains for success, but also severe losses from failure (Funk and Eichenberger 2006).

We argue therefore that an open system would be particular beneficially for constituencies which are fiercely divided or/and do not have a long history of democratic institutions. Especially in fragile states and divided societies where the political institutions fail to constrain political power, an impartial outsider may provide the necessary services. Moreover, in such states - similar to the argument of Myerson (2006) for federalism - the heterogeneity of constitutions is of particular importance because politicians have incentives to build up a reputation.

Federalism: A federalist state provides some of the openness, which can fuel career concern. Just think of the heterogeneity of principals as different federal levels, that is \underline{I} -type principals are communities and \bar{I} -type are states. Of course this would also constitute one of the major heterogeneities in an open political market. The possibility to ascend to the state level provides the much needed career opportunities. Again we would expect the more able politicians having the higher value of continuation and therefore

exerting higher effort.

Note, that in a federalist state, openness has similarities to a elimination tournament à la Rosen (1986), in which the top prize is the highest office. As the value of continuation is the highest for the best agents, they will exert extra effort, even if they are quit certain to win a particular round.

However, there are some features of the institutional design, which weaken incentives in a federalist state. Firstly, because political agents can not move horizontally, there is no market pressure to adjust wages and consequently there is no learning effect. Secondly, there is only one way of promotion, which can easily be controlled by political parties. Thirdly, in a federalist state sabotage becomes a problem, because it is easy to identify a potential challenger (Funk and Eichenberger 2008) whereas in an open market sabotage is a public good (Konrad 2000).

5 Preliminary Tests and Anecdotal Evidence

Today, there exist only few markets for political agents, which allow us to gain a better understanding of the connection between organizational openness and career concerns in politics. Especially rare is the combination of an open market for political agents and elections. However, if openness of political organizations is the dimension of interest, then the city managers in the USA and some Nordic countries are a valid example. Firstly, we therefore examine the US market for city managers in order to find support for our argument. We start with the US case because we can resort to a substantial literature in economics as well as in political and public administration sciences. Secondly, on this fundament we will investigate some of the claims in more detail with our own data on Finnish city managers. Thirdly, we turn to the most interesting but least explored example of a political market: the mayors in the German state of Baden-Württemberg, who are elected politicians operating in an open market environment.

City Managers in the USA: Today a majority of US municipalities are run by a council-manager government. Its main characteristics are an elected city council of mostly lay politicians, which appoints a city manager who is responsible for the executive branch and the municipal administration. The city manager usually is a professional outsider who has a work contract; however, he can be removed from office at any time. Historically, the council-manager model was promoted by the progressive reform movement at the beginning of the 20th century. It has always been considered to be the non-partisan, technocratic model of municipal governance. Today, more than 60% of the municipals adopted this model. The other 40 % follow the so-called mayor-council model with some form of elected mayor as political leader, who - of course - has to be a resident at the time of election.¹⁵

The question which we want to address first is to what extent the US city managers are actually driven by career concerns stemming from a competitive market. There is overwhelming evidence that this is the case. Buckwalter and Parsons (2000) find in a survey of city managers' careers some 65% following a classical career path: they enter the manager market as head of department, from where they gradually progress upwards, from assistant manager to a first city manager position in a small town, and finally, to a management position in a larger city. Usually this ascent comes with a substantial increase in salary and prestige. Only 10% of the city managers are described as static, whereas 10% move horizontally between similar position; 15% move proactive between several careers ¹⁶.

Undoubtedly, mobility is central to a city manager's career and those who are successful tend to start in smaller cities and move on to bigger ones. Most city managers serve in two or three different cities over a career, but five to six places are not uncommon. Average tenure in a municipality lasts some 8 years. Today around 80% of the city managers do not come from the community they serve, though in the biggest cities a substantial part (45%) conducted a career inside a single city (Watson and Hassett 2004). City managers are well educated professionals, of which 71% have received a master's

¹⁵For a detailed introduction to the US city managers see Morgan and England (2005).

¹⁶On the different career paths see also Watson and Hassett (2004).

degree in public administration or a related field (McCabe, Feiock, Clingermayer, and Stream 2008). They earn comparatively high wages, though the spread is considerably (Morgan and England 2005).

After having established the market structure, it remains to highlight some specific patterns, which we would expect when agents are motivated by career concerns. McCabe, Feiock, Clingermayer, and Stream (2008) find strong evidence for the evaluation of city managers' performance along strict professional standards and a narrow mission. Firstly, city managers are expected to have a specific education which allows to signal competence in a competitive market. Secondly, important peer groups, such as community officials and other city managers, especially appraise the economic development of a municipal. Good performance on that dimension allows the responsible city manager to advance on the job market and move to more lucrative position.

Support for this result comes from Raschky and Weck-Hannemann (2007), who argue that council members evaluate city managers rather on objective performance measures such as mean family income. But if expected income is the crucial dimension, city managers should show a different behavior in the face of low-probability-high-loss events such as natural hazard because such an event bears the danger of much lower income in the future. In order to test this hypothesis, Raschky and Weck-Hannemann (2007) look at the adoption of federal risk-transfer regimes for flooding and obtain the expected result: council-manager municipalities tend to be more likely to adopt federal risk-transfer regimes for the case of natural hazard. Another interpretation of this result follows a more traditional claim, which we adopted earlier: elected mayors tend to follow the short term goal of increasing their reelection probability whereas city managers maximize their income over a whole, usually much longer career (e.g. Feiock, Jeong, and Kim (2003)).¹⁷

Are there any systematic efficiency differences between council-manager and mayor-council municipalities? Our model cannot produce a conclusive result on this matter, however, we would expect a competitive market where talent is efficiently sorted among different community to be more efficient. The steady trend towards the council-

¹⁷Zhang (2007) shows e.g. for Florida that the city managers have a professional career, which lasts on average 20,5 years whereas mayors stay only 9,5 year in office.

manager model over the past hundred years provides anecdotal support for this view. The little empirical research on the topic is not conclusive. Hayes and Chang (1990) cannot find any systematic efficiency differences, whereas Kreft (2007) shows that in council-manager municipalities home owner gain a pricing premium due to capitalization of efficient governance. The most interesting result regarding our model comes again from Hayes and Chang (1990), who find a significant efficiency difference between council-manager and mayor-council government only for the bigger cities: city managers are more efficient in leading bigger cities than mayors. This is exactly what our model predicts: if we assume the high ability mayors as well as the high ability city managers being matched to the biggest cities, we would expect the latter working hard whereas the former exert only little effort.

City Managers in Finland: There are good reasons to take the Finnish City Managers (*kunnanjohtajat*) as a further example for our argument. Firstly, the Finnish municipal system has only a single tier, which is why the municipalities are responsible for a much wider range of public duties. Secondly, besides being the head of public administration and being responsible for any policy implementation, the Finnish city managers are highly involved in the formulation and promotion of policies. Thirdly, the main political bodies, the municipal council (13-85 members) and its executive board, consists of elected lay politicians, which is why a majority of the politicians and citizens describe the city manager as the most powerful position in the municipality¹⁸. Fourthly, from the more than 400 communities, each year around 10% change their city manager, which is a sign for an established market. In short, of any chief bureaucrats or city managers, the Finnish ones are the most powerful and have the widest range of responsibilities. Their profile is as close to an executive politicians as possible while still being an appointed bureaucrat.¹⁹

For first results see: Loikkanen, Susiluoto, and Funk (2008)

¹⁸Source?? 70% say...

¹⁹For a detailed introduction to the Finnish city managers see Sandberg (1998).

TO BE COMPLETED

Mayors in Baden-Württemberg: The only existing political market which combines both, open political organizations and direct elections is to our knowledge the market for mayors in the German state of Baden-Württemberg. The key difference to any other institutional design is that the mayors are allowed to run for office without being resident in the community. Surprisingly, the politicians as well as the citizens of Baden-Württemberg are not aware of the singularity of their political institutions. However, we find very similar patterns to the market for city managers, which indicate that these mayors are as well driven by career concerns in a competitive political market.

The market structure is as follows. There are more than 1100 communities in Baden-Württemberg, which differ greatly in size and wealth²⁰. A mayor's term lasts for eight years, whereas the community council faces every five years an election. In Baden-Württemberg only persons can run for office; that is, political parties do not have the right to propose a candidate. The office of the mayor is very powerful in comparison to any other German state. The mayor is the executive of the community and as such also the head of bureaucracy. Furthermore he holds a seat in the communal council, which is usually composed of lay politicians. Consequently the mayor has significant agenda-setting powers. The wage corresponds to a high bureaucrat's salary. It is determined on state level and increases with the size of the municipality. Especially the move from a small community with a simple "Bürgermeister" to a bigger city where the head of the community goes with the title "Oberbürgermeister" is financially as well as for prestigiousness very significant. From the second term on mayors qualify for very desirable pension benefits.

The implication of the simple difference in eligibility are surprising. There is an actual market for mayors, which demands a very specific professional profile and career. For a start, more than 80% of the mayors are outsiders; that is, they are at the time of the election not resident in the community (Wehling 2000). Even though many descend from the same region, they might not have had any close contact with the community

²⁰Baden-Württemberg has altogether 10 million inhabitants. The size of communities varies from 100 to almost 600000 inhabitants (Stuttgart).

itself. Many candidates start a campaign, while they are still holding office in another community. The achievements in the old communities are then the credible job record and the policy platform for the new position.

The electorate in Baden-Württemberg prefers independent non-local candidates. More than half of the mayors do not belong to a political party and even party members distance themselves from any partisan program. They run as individual candidates and try to build up a reputation for being independent professionals. Mayors are expected to be the public trustee who governs for all the inhabitants of a community. Any departure from such neutral profile might jeopardize the reelection (Kern 2007).

The vast majority of mayors start their careers by studying Public Administration Sciences at the Universities for Applied Science in Kehl or Ludwigsburg. In contrast to any other political career in Germany or elsewhere, the mayors in Baden-Württemberg need a specific qualification, which is in steep contrast to the usual "learning on the job" in politics. Young men and a very few women decide in their early professional life to pursue a career as mayor. Usually a career continues in the public administration on a position as close as possible to an experienced mayor. There the young aspirants are confronted with the day to day requirements of their future job.

The actual career as a mayor begins in a smaller community, where no incumbent candidate is running for office. About a year before the election the community publicly announces the vacancy. The next important event is the official presentation of the candidates, when each candidate has to present himself and his program to a municipal assembly. A mayor always runs a "one-man-show" and he has to pay any campaign costs from his own pocket. Only in bigger cities such as Stuttgart, Mannheim or Kalsruhe, political parties play again a bigger role during the election campaign: an independent candidate simply could not afford the costs.

The election is won by the candidate first receiving more than 50% of the votes; often there are several ballots. Contested elections attract quite some attention and generate high voter turnout. In contrast, when a strong incumbent runs for re-election often no serious challenger appears and turnout is low. Then, even a good local challenger prefers to run in another community. This selection effect is of course the reason for a gigantic

incumbency advantage. However, an experienced, long serving mayor might suddenly face a young ambitious challenger from outside and actually lose (for examples see Kern (2007)). Because most candidates have a well known education and a comparable track record, election campaigns tend to confine to factual matter and political programs. Hence, negative campaigning or/and strong local ties without any political credentials do usually not pay off.

After serving one term of eight years in a community and winning re-election, an ambitious mayor usually starts to evaluate new opportunities. Now he has earned the security of the pension benefits and the reelection sends a strong signal to any future employer. Some take the federal career path seeking office on the state level. Not surprisingly, Baden-Württemberg is widely considered to be governed by mayors - two former head of state, Lothar Späth and Erwin Teufel, started their career as mayors. However, most mayors advance vertically within in the municipal system, from small to a bigger community to a town.

The communal system in Baden-Württemberg is considered to be very successful and efficient. This is widely attributed to the powerful, directly elected mayors, which is why the former Eastern German states all adopted to a similar communal rule. Of course, there was one part they did not adopt: they all restricted eligibility to residents. However, the example clearly shows, that direct elections and an open organizational form with strong career concerns are not exclusive.

6 Conclusion

Our quest for an adequate design of political markets departed from the observation that today's political markets are rather imperfect. Because agents are bound to their constituencies there is actually no real political market, where different supplier of political services meet the demand of different consumers. This imperfectness has important implications: Political institutions are characterized by a principal agent-problem between the electorate and the politician, who performs multiple and hardly measurable tasks. Agency theory finds that such an elusive environment does not allow for any explicit

incentives. Apart from intrinsic motivation the electorate therefore has to rely on implicit career incentives of their political agents. However, such incentives are very flawed because today's political institutions prevent political agents to transfer their reputation to other constituencies. Consequently the very design of political institutions enhances low performance, rent-seeking and pandering to special interests.

The importance of implicit career incentive for politicians raises the question for a suitable design of political markets. Whereas the current literature concentrates on the dimension of elected versus appointed political agents, we draw the attention to the dimension of openness of political organizations; that is, how easy is it for an agent to seize an outside option; respectively, how easy may an agent enter an organization from outside. We therefore examined the incentive properties of career concerns à la Holmström (1999) in an open versus a closed organization.

We find three important effects: Firstly, open organizations allow for assortative matching, which we would expect to be more efficient than the random matching of closed organizations. Secondly, effort increases in the signal to noise ratio. This learning effect derives from the adjustment of the wages to expected ability. In a closed organization the principal's knowledge of an agent's ability does not directly effect the wage but the probability of winning the office, which is why the learning effect is much weaker. Finally, incentives are fuelled by the agents' possibility to move to a more attractive community, respectively by the threat of a challenger ascending from outside: this is the reputation effect. Hence, high ability politicians are more probable to work for a high productivity constituency, which is why the agents' effort is constantly increasing in talent.

The efficiency gains in open organizations do not derive from the design of the singular institution but from the multiplicity and diversity of institutions in a market. We therefore propose a political market design which allows for such multiplicity. The key institutional adjustment is to allow outsiders to run for office, which also deprives the principals of their monopsony wage-setting power. In such an market environment career concerns combined with the powerful screening capacity of elections may finally provide a feasible incentives scheme for political agents. Most importantly such a design would allow politicians to transfer their reputation to other, more attractive constituencies.

Additionally, because both, the principals and the agents are interested in a narrow mission and a good reputation will pay off over a whole career, politicians will have strong incentives to invest in job specific human capital.

We found strong anecdotal evidence that career concerns can indeed provide the necessary incentives for political agents. The city manager in the United States and in Finland are clearly motivated by career concerns. These examples also revoke the frequent claim that political agents have to be local, because outsiders would lack a specific local knowledge. The example of the mayors in Baden-Württemberg supports this findings, as even in direct elections the citizens seem to prefer outsiders to insiders. Moreover, the mayors in nBaden-Württemberg strongly supports our claim that elections and the admission of outsiders are not mutually exclusive.

There are many roads for further research. In the theoretical part additional specifications should be explored, especially a multi-task setting and a multiplicative production function of the agents. The most promising complementation, however, is on the empirical side, where we would like to test our theoretical findings with data on the US city managers and the mayors of Baden-Württemberg.

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